

ABSTRACT

Systems and methods for personal identification, preferably based on iris identification, include a camera for acquiring a presented image of a presented individual and a computer device for converting the presented image into a presented image metric. The computer device also compares the presented image metric to a predetermined arrangement of a plurality of reference image metrics of known individuals to identify the presented individual as one of the known individuals. The presented image metric and the plurality of reference metrics are both formatted to represent detailed physical characteristics of the individuals, including iris characteristics and other physical characteristics. Further, the plurality of reference image metrics may also be formatted to represent user-defined characteristics, which include non-image-related characteristics. The predetermined arrangement of the plurality of reference image metrics are ordered to provide a fast match with the presented image metric. As such, the predetermined arrangement may be based on iris characteristics, other physical characteristics and user-defined characteristics. Alternately, the system of the present invention may include a carousel system that presents a circulating, predetermined arrangement of a series of reference image metrics that are compared with a plurality of presented image metrics in parallel. Thus, the systems and methods provide a fast match determination between the presented image metric and the plurality of reference image metrics in order to identify the presented individual.